

Factoring Using the Box Method

(similar to the AC Method with a box)

1. Factor out all common factors, if there are any.
2. Identify A , B , and C then multiply A and C ($Ax^2 + Bx + C$).
3. List all factors of AC .
4. If AC is positive, find the pair of factors that add to get B . If AC is negative, find the pair of factors that subtract to get B .
5. Place the first term in the top left corner of your box.
6. Place the last term in the bottom right corner of your box.
7. Put the two factors of B (from Step 4) into the two remaining sections of your box.
8. Factor out the common factors across and up.
9. The binomials across the top and down the side are your factors.

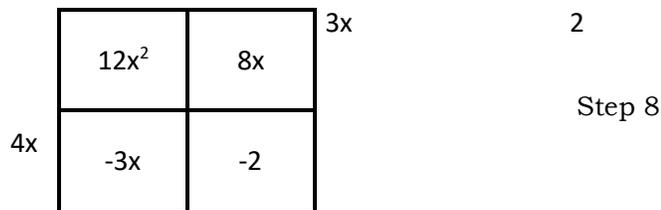
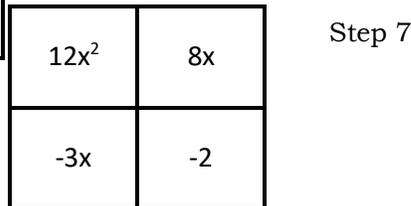
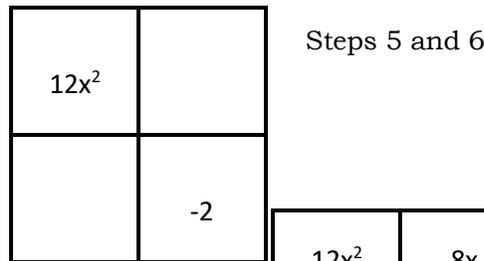
Example: $12x^2 + 5x - 2$

$A = 12, B = 5, C = -2, AC = -24$ Step 2

24 Step 3

- 1 x 24
- 2 x 12
- 3 x 8
- 4 x 6

$-24 = 8x - 3$ Step 4



-1

$(3x + 2)(4x - 1)$

Step 9 Answer

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